

Rules and Regulations for the Classification of Naval Ships, January 2013

Notice No. 6

Effective Date of Latest Amendments:

See page 1

Issue date: November 2013



# RULES AND REGULATIONS FOR THE CLASSIFICATION OF NAVAL SHIPS, January 2013

### Notice No. 6

This Notice contains amendments within the following Sections of the *Rules and Regulations for the Classification of Naval Ships, January 2013.* The amendments are effective on the dates shown:

Volume	Part	Chapter	Section	Effective date
1	1	3	5, 15	Corrigenda
1	5	3	2	Corrigendum
1	6	2	3	Corrigendum
3	2	2	2	Corrigendum

It will be noted that the amendments also include corrigenda, which are effective from the date of this Notice.

The Rules and Regulations for the Classification of Naval Ships, January 2013 are to be read in conjunction with this Notice No. 6. The status of the Rules is now:

Rules for Naval Ships	Effective date:	January 2013
Notice No. 1	Effective date:	1 July 2013
Notice No. 2	Effective date:	1 January 2014
Notice No. 3	Effective date:	1 January 2014
Notice No. 4	Effective date:	1 January 2014
Notice No. 5	Effective date:	Corrigenda
Notice No. 6	Effective date:	Corrigenda

# Volume 1, Part 1, Chapter 3 Periodical Survey Regulations

#### **CORRIGENDA**

### ■ Section 5

### Special Survey - Hull requirements

### 5.4 Examination and testing – Additional items for steel ships

5.4.2 In salt-water ballast spaces, integral sanitary tanks and bilges where the protective coating is found to be other than in GOOD condition as defined in 1.5.8 1.5.9 and it has not been repaired, maintenance of class will be subject to the spaces in question being internally examined and gauged.

#### Section 15

### Machinery planned maintenance and condition monitoring, MPMS, MCM and RCM

### 15.7 Annual audit and survey

- 15.7.1 At the annual audit the Marine Engineer Officer is required to make available the maintenance and monitoring records. These records may be in a hard or soft format and should include:
- (a) Appropriate records of machinery or equipment surveyed under the supervision of the Marine Engineer Officer that are listed in the Master List of Surveyable Items. These statements should give details of repairs carried out and spare parts used.
- (b) Written details of any breakdown or malfunction of essential machinery. Such details should include the main cause of failure.
- (e) LR Certificate(s) of Authorisation for the Marine Engineer Officer(s) responsible for surveys during the period.

These records will be examined in sufficient depth by the LR Surveyors to ensure that the scheme has been correctly operated and that the machinery has functioned satisfactorily since the previous survey. The records should indicate that all scheduled maintenance has been carried out. Any items not dealt with as per schedule will be discussed with the Marine Engineer Officer.

# Volume 1, Part 5, Chapter 3 Local Design Loads

### **CORRIGENDUM**

### ■ Section 2

### **Motion response**

## 2.4 Design vertical acceleration for ships in the planing regime

(Part only shown)

2.4.2 The non-dimensional vertical acceleration at the LCG,  $a_{\rm op}$ , is defined as the average of the 1/100 highest accelerations and is to be taken as:

 $\theta_D$  = deadrise angle at the LCG, in degrees, but is not to be taken as greater than 30°, see Fig. 3.2.1

### Volume 1, Part 6, Chapter 2 **Design Tools**

#### **CORRIGENDUM**

Section 3

**Buckling** 

3.4 Derivation of the buckling stress for plate panels

For welded plate panels with plating thicknesses below 8 mm, the critical compressive buckling stress is to be reduced to account for the presence of residual welding stresses. The critical buckling stress for plating is to be taken as the minimum of:

$$\sigma_{cr} = \sigma_e - \sigma_r$$

 $\sigma_{\text{c}}$ 

as derived using 3.4.1

where

 $\sigma_r$  = reduction in compressive buckling stress due to residual welding stresses

$$= \frac{2 \beta_{\rm RS} \sigma_{\rm o}}{b/t_{\rm o}}$$

 $\beta_{RS}$  = residual stress coefficient dependent on type of weld (average value of  $\beta_{\mbox{\scriptsize RS}}$  to be taken as 3)  $t_{\rm p}$  and  $\sigma_{\rm o}$  are defined in 1.3.1  $\sigma_c$  is derived in 3.4.1 b is defined in 3.2.1.

### Volume 3, Part 2, Chapter 2 **Environmental Protection**

### **CORRIGENDUM**

Section 2

**ENV** characters

- 2.1 Anti-fouling coatings - A character
- 2.1.1 For assignment of the A character, the anti-fouling system applied to the ship's hull is to be listed as nonbiocidal or biocide-free in the Lloyd's Register List of Approved Products.

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